Cargo Mission Contract (CMC)
Future Requirements Presentation

August 20th, 2009

Johnson Space Center

Agenda

Speaker	Time	Subject
Eric Schell	9:00 – 9:10	Introduction
Tom Costello Paul Rathbun Kevin Engelbert	9:10 – 10:45	Technical Information
Eric Schell	10:45 – 11:00	Procurement Information

Procurement Development Team (PDT)

Tom Costello – PDT Chair

Eric Schell – BG/ISS Procurement Office

Paul Rathbun – OB/Vehicle Office

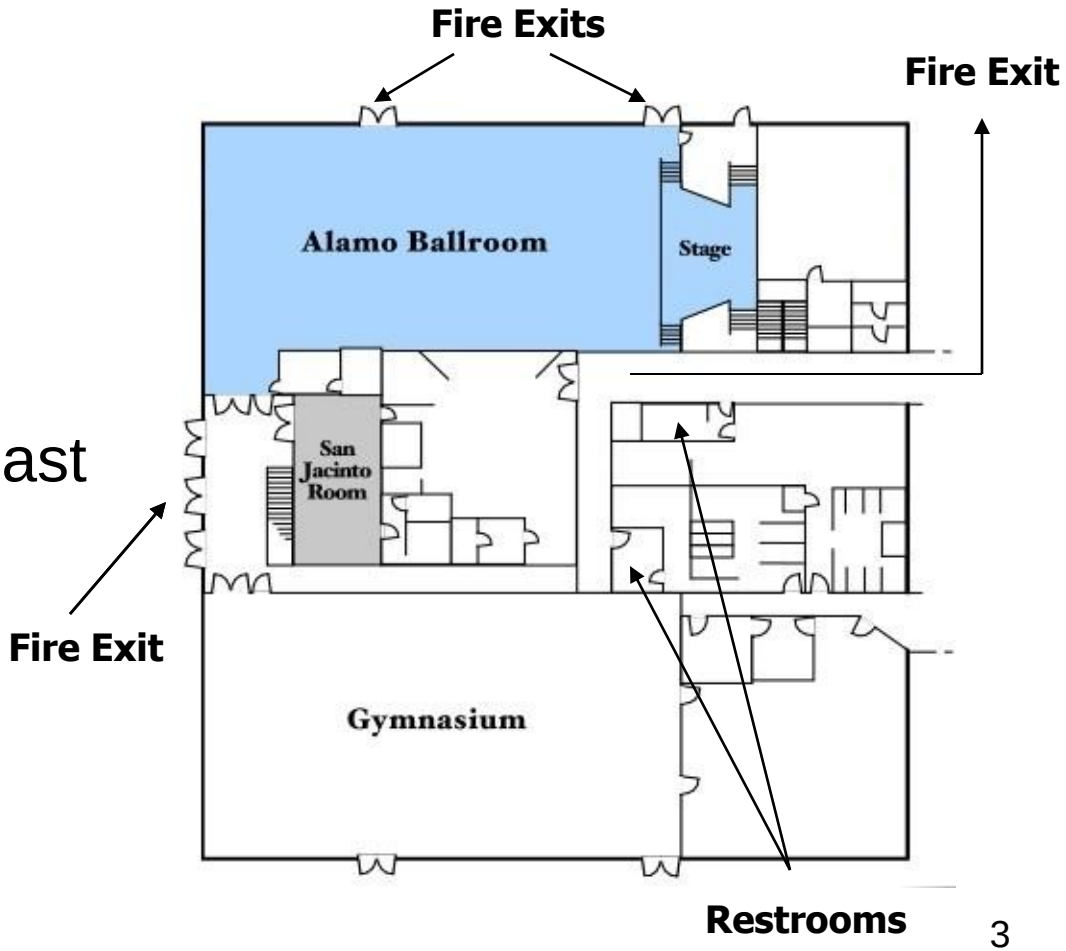
Kevin Engelbert – OC/Mission Integration & Operations Office

Stan Siemienski – OE/Safety & Mission Assurance/Risk Office

Safety and Administrative Information

Restrooms can be found in the hallway outside this ballroom.

Fire exits are the front entrance and side exit doors. In the event of a fire, you must move at least 75ft. away from the building.



Disclaimer

- These slides are for information and planning purposes only. No solicitation exists at this time.
- This presentation shall not be construed as a commitment by the Government or as a comprehensive description of any future requirements.
- If a solicitation is released, it will be synopsized in the FedBizOpps website and on the NASA Acquisition Internet Service.

Goals of Future Requirements

- Promote competition on the proposed follow-on acquisition for the International Space Station Program
- Provide industry an overview of the CMC and FCE requirements planned to be included in the follow-on procurement
- Develop industry understanding of the Government's current vision and objectives pertaining to the pre-solicitation synopsis NNJ09ZBG003R
- Provide industry with the opportunity to meet with the Government early enough in the procurement process to provide input into the procurement strategy and requirements
- Encourage offerors to submit questions and comments in writing via the CMC website or in person. The Government will respond in writing to all questions submitted by posting them to NAIS and the CMC procurement websites.

Responses to Questions

- Verbal questions will be answered during the presentation. Responses to verbal questions will not be considered official. The Government expects that verbal questions received from Industry will be followed up in writing.
- Questions submitted in writing will be answered and posted to the procurement website and will be considered official responses. If a difference exists between verbal and written responses to questions, the written responses shall govern.

Overview

Introduction
- Changes since Industry Day
- Constellation Support

Management Integration and Control

Safety and Mission Assurance

Hardware Technical Overview

Pressurized Cargo Integration

Procurement Information

Tom Costello
PDT Chair

Changes since Industry Day

- Shuttle Unique CMC Scope - removed from follow-on
  - Cargo Mission Management
    - Cargo Analytical Integration (MPLM, RSR, RSP)
  - Unpressurized Cargo/Carrier Integration
  - Shuttle Program Stowage Integration (Crew Compartment Integration)

- Shuttle Scope Supporting ISS
  - FCE Scope (Only that equipment used by ISS or CxP transitions)
    - Electronics and Computers
    - Crew Provisioning/Other Hardware
    - Food Processing/Hardware (does not transition to this contract)
    - Crew Survival Equipment, not the suits (for CxP)

    - EVA is not part of FCE so not part of discussion to transition to this contract

- Non-Shuttle Unique Scope
  - Pressurized Cargo (Bag) Processing
    - ATV, HTV, Progress, Soyuz
    - COTS, CRS (SpaceX and Orbital)
    - CEV (not in current contract scope, but CxP support will be in follow-on)

RFI Comments

- **We believe that hardware transition is our largest risk, and that providing the right data is required to help mitigate that risk**
  - Ensuring continuity of services
  - Facilities
  - Data
- **We greatly appreciate your responses to our RFI, but have not yet reached closure on our options, and are considering all the inputs**

- **As noted in our RFI, specific location of facilities will not be a contract requirement**
  - The Space Station Processing Facility (SSPF) on-site at KSC has space available. For information contact

    Jose Nunez, Ph.D., P.E.
    International Space Station/Spacecraft Processing Directorate
    Acting Deputy, Mission Management Office
    Mail Code: UB-R
    NASA Kennedy Space Center
    Ph. (321) 867-5922, Cell (321) 289-2479

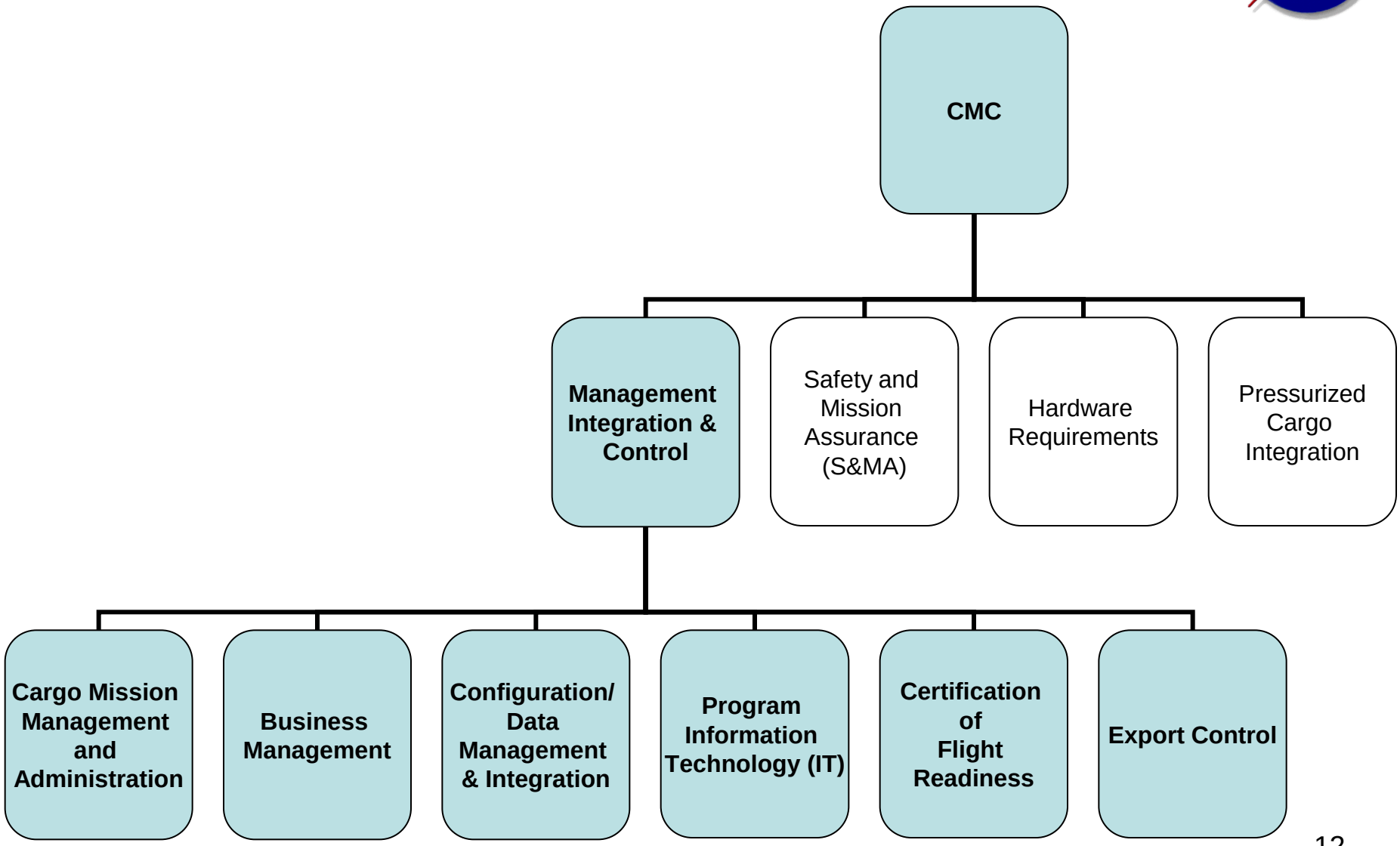
Constellation Support

- **The Constellation Program (CxP) plans crewed flights of the Crew Exploration Vehicle (Orion) to the ISS to perform ISS crew rotations, deliver ISS logistics, and use the ISS as a test bed for various CxP risk reduction activities**
- **The CxP missions to the ISS will be planned with maximum possible use of existing ISS FCE hardware and software**
- **The ISS Program will provide existing FCE in support of CxP missions to the ISS**
- **The ISS Program process for ground processing will be utilized by the CxP for both ISS Program and CxP provided FCE**
- **The ISS Program will provide secured and controlled or bonded storage as required and ground processing facilities in support of CxP missions**

Management Integration and Control

Mission Management and Administration
Business Management
Configuration and Data Management and Integration
Information Technology (IT)
Certification of Flight Readiness (CoFR)
Export Control

Scope of Work



Mission Management and Administration

- **Cargo Mission Management Plan**
  - Describes the contractor's management structure that integrates all related plans and systems, including those of major subcontractors and vendors.
- **Performance Management Reviews (PMR)**
  - Period of the review is under review, Monthly versus Quarterly
  - Metrics reporting
    - Expect this to be proposed by the offerors and the explanation of how the metric facilitates management of the contract part of the evaluation criteria
- **Management and Information System (MIS) Data Requirements**
  - NASA selects data or information from existing DRDs for the contractor to link to the MIS
  - Contractor responsible for implementing format changes necessary for compatibility and electronic linkage
- **External and Internal Reviews**

Business Management

- **Contract Financial System**
  - include financial reporting requirements for any subcontracts for all tiers of subcontracts with annual expenditures of $1 Million or more
  - Deleted 1.2.1.2. Performance Measurement System (Earned Value)
- **Contract Work Breakdown Structure (WBS)**
- **Workforce Report**
  - Produce Workforce Reports to show organization, geographical breakdown and off-site versus on site workforce data
- **Schedule content has been deleted from this section**
  - Common schedules database has been removed from the Program requirements for a single integrated Program schedule
  - Flight, development, and team specific schedules have replaced the single integrated schedule
  - DRD C-PC-05 would still be expected for schedule deliverables

Configuration and Data Management and Integration

- **Configuration Management (CM)**
  - SSP 41170, ISS Program Configuration Management Requirements
  - SSP 50123 Configuration Management Handbook
  - Key focus area is Configuration Status Accounting and Verification
  - Key focus area is Configuration Control and Change Management

  - We recognize issues that historical data for FCE developed and maintained under Shuttle requirements may not meet ISS requirements, and we plan to accept the existing data set as is.
  - Expectation is subsequent serial number units built, only the specific change to existing products, and new products will comply with ISS requirements

- **Data Management (DM)**
  - SSP 41170, ISS Program Configuration Management Requirements
  - SSP 50010, Standards for ISS Program Documentation
  - SSP 50172, Data Management Handbook

  - We are assessing if contract will be directed to utilize JSC systems due to FCE normally being hardware originally developed by JSC

Information Technology (IT)

- Contractor employees located on-site at a NASA center (or near-site using NASA IP address space) will be provided with government furnished IT services available through Agency contracts (e.g. ODIN).

- For example, this would include desktops/laptops, local area network connections, data storage and phones.

- The contractor will provide for all off-site IT necessary to perform contract requirements.

- Any off-site Government Furnished Equipment will be identified in the governments Request for Proposal.

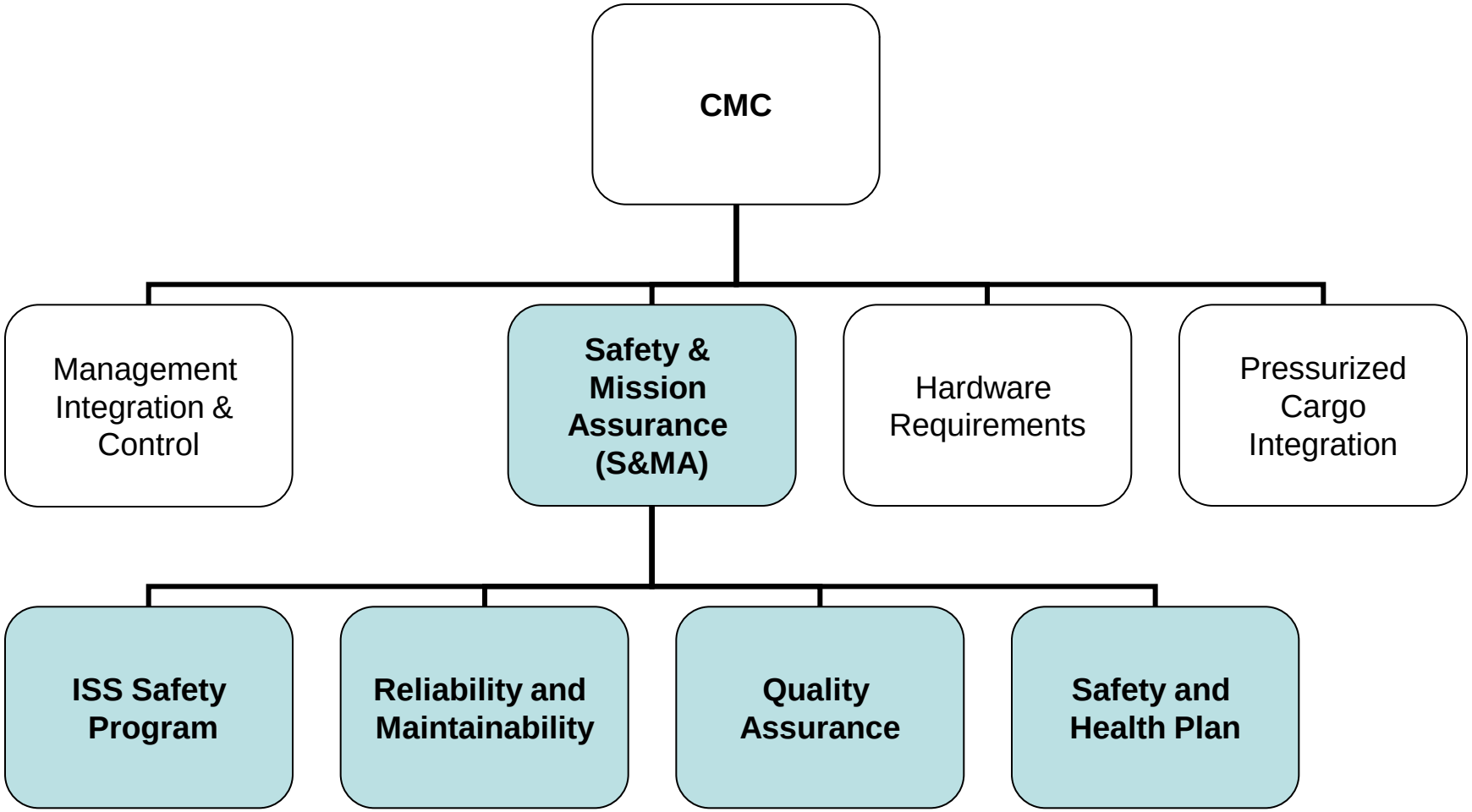
IT, CoFR, and Export Control

- **IT**
  - ISS Capital Planning Process, SSP 50222.
  - IT Technology Security Plan in compliance with NFS 1852.204-76.
  - This contract will process non-sensitive and sensitive but unclassified (SBU) types of data, including proprietary, privacy, medical and export controlled information. The following NASA FAR clauses are applicable:
    - NFS 1852.227-14, Rights in Data
    - NFS 1852.237-72, Access to Sensitive Data
    - NFS 1852.237-73, Release of Sensitive Information
  - Delete CVES as a requirement, having a web based method of information sharing is valued, it is not a requirement to have a Virtual Enterprise System
- **Certification of Flight Readiness (CoFR)**
- **Export Control**

Safety and Mission Assurance

ISS Safety Program, Reliability and Maintainability
Pressurized Cargo Integration
Quality Assurance
Safety and Health Plan

Scope of Work



Safety and Mission Assurance (S&MA)

- ISS Safety Program
  - Includes safety assessments and hazard reports for each design phase of new hardware development
    - NPR 8715.3 NASA General Safety Program Requirements
    - SSP 50021 Safety Requirements Document
    - SSP 30599 Safety Review Process
    - SSP 30309 Safety Analysis and Risk Assessment Requirements

- Reliability and Maintainability
  - Includes FMEA and CIL Worksheets and R&M Allocation, Assessment, and Analysis (AAA) Report
    - SSP 30234 Failure Modes and Effects Analysis and Critical Items List Requirements for Space Station

Safety and Mission Assurance (S&MA)

- Pressurized Cargo Integration
  - Integrated Cargo Hazard Analysis which produces a Integrated Bag Level Hazard Assessment (IBLHA)
    - Analysis includes a review of bag drawings, flight manifest, return manifest, GFE Certification Data System (CDS) and safety data packages for cargo items packed
    - IBLHA includes a safety assessment that is to certify that the hardware packed together in a bag or specialized stowage accommodation will not create any new hazards
    - Includes recommendations and constraints on bag co-locations and placement

Safety and Mission Assurance (S&MA)

- Quality Assurance
  - Develop, implement and maintain an AS9100 quality assurance program
    - 3rd Party Certification
  - GIDEP Participation
- Safety and Health Plan

Hardware Technical Overview

Hardware Scope
Scope of Work Overview
Hardware Examples

Paul Rathbun
OB/ISS Vehicle Office

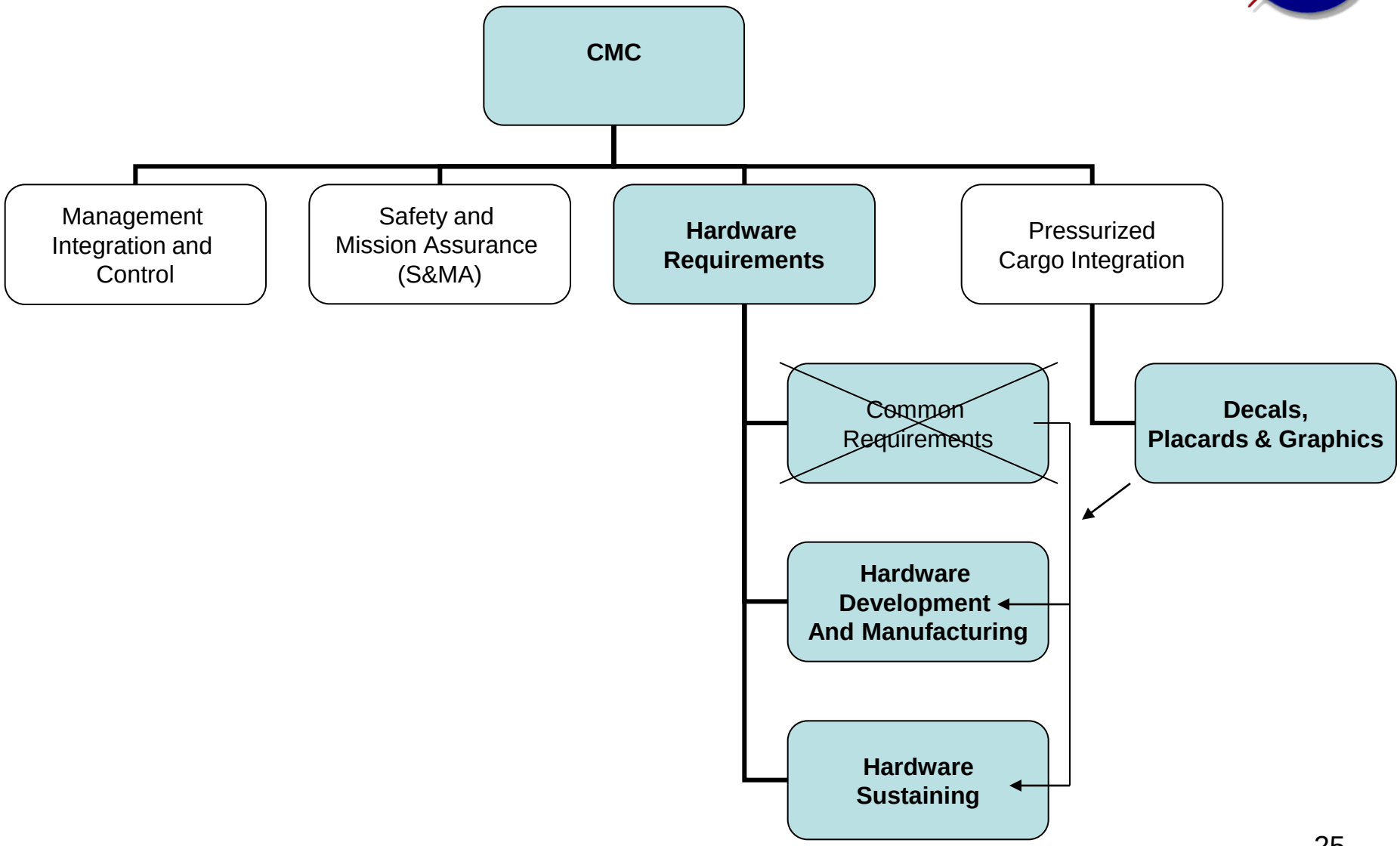
Hardware Scope

- **Original Industry Day presentation pointed out that SPOC FCE is responsible for approximately 120,000 line items of flight and training hardware and Ground Support Equipment (GSE) which support training events, missions events and bench reviews for Shuttle and ISS**
  - PDT estimates less than 3,000 upper level certified items will transition to CMC
  - Includes multiple dash numbers of flight and training H/W and GSE

- **H/W Categories Include (estimated upper level certified items)**
  - Flight Crew Systems (Clothing, Hygiene, Office Supplies, R&MA) (875)
  - Batteries (40)
  - Electronics and Computers (150)
  - Photo/TV (225)
  - Cables (60)
  - ECLSS Water Transfer Hardware (40)
  - Constellation Crew Survival Hardware (30)
  - GSE (1400)
  - Stowage Bags (CTBs, M-bags) (45)
  - Decals (moved from Cargo Processing section of SOW)

- **The following hardware categories/responsibilities <u>will not be included</u> on the CMC**
  - ISS Food Preparation, Packaging, and associated hardware
  - Unpressurized FSE Sustaining Engineering
  - RSR/RSPs Sustaining Engineering

Scope of Work



Hardware Development and Manufacturing

- **Hardware developed will be required to adhere to ISS Program processes and requirements including but not limited to the following:**
  - SSP 50835, ISS Pressurized Volume Hardware Common Interface Requirements Document (CIRD)
  - SSP 50492, General ISS On-Orbit Requirements for Non-Pressurized Support Equipment
  - SSP 50287, Hardware/Software Acceptance Process
- **SSP 50276, Depot/Manufacturing Certification Plan process to be completed prior to manufacturing at alternate site from the Original Equipment Manufacturing facility**
- **Decal Design and Production - Provide flight and non-flight decals, placards, and graphics for NASA's ISS Program, CxP, and related research and development programs and spacecraft, including prototypes, mockups, trainers, and engineering mockups.**

Hardware Sustaining

- **Hardware Sustaining is composed of M&O and Sustaining Engineering**
  - Contractor will have M&O responsibility for all H/W on contract
  - Sustaining Engineering may be constrained to a subset of H/W on contract
- **Availability of historical engineering data for each item will be one of the deciding factors regarding H/W to be sustained on the CMC**
- **Sustaining Engineering is planned to be included for:**
  - Stowage Bags (CTBs, M-Bags)
  - Foam Clam Shell Box/Straps built for RFTA
  - Items requiring Material Only Certification (i.e. FCE Clothing, Hygiene, Office Supplies)
  - Non-modified COTS
  - Ground Support Equipment
- **NASA System Management Teams retain oversight and signature authority**

Maintenance and Operations

- **M&O is comprised of tasks (logistics support functions and touch labor) that do not require engineering authority**
  - Provisioning and Inventory Management: All activities and analysis required to maintain inventory levels required to support Flight and Training activities
  - Processing of Hardware for Flight and Training: The activity associated with configuring and testing hardware for flight from engineering drawings and Pre-Delivery Acceptance (PDA) and Pre-Installation Acceptance (PIA) procedures
  - Maintenance and Repair: Activities required to return hardware to print. Activities may include but are not limited to:
    - Use of Standard Repair Procedures
    - Refurbishment using replacement parts/procedures
    - Cleaning
  - Procurement and, or manufacture of spare equipment
- **SSP 50276, Depot/Manufacturing Certification Plan process to be completed prior to repair or manufacturing at alternate site from the Original Equipment Manufacturing facility**

Sustaining Engineering

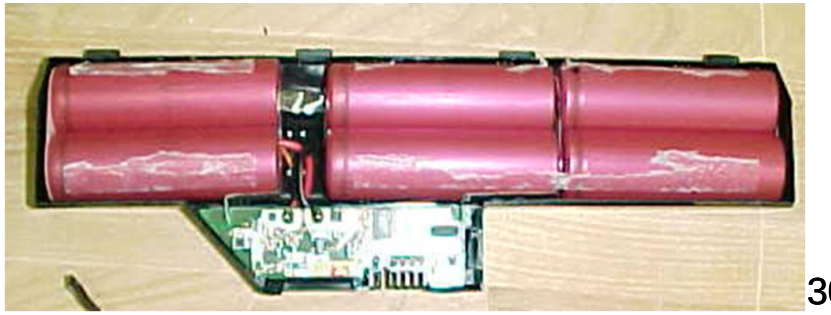
- Hardware Performance Analysis: Monitor and analyze actual versus expected behavior, update maintenance data and plans, and expand certification limits are examples.
- Anomaly Resolution: Document applicable anomalies in PRACA system and participate in On-orbit anomaly resolution process.
- Modifications to Existing Hardware: Provide engineering products (drawings, reports, Time Compliance Technical Instruction (TCTI)) as directed by Program change requests. Mod kit requirements as defined in SSP 41170 are not applicable.
- Hardware Certification Tracking: Review of all processing procedures, drawing changes, and MRB dispositions to ensure hardware certification is not violated
- Engineering Drawings and CAD Model Maintenance: Updating drawings and models as part of design change process
- Obsolescence Management: Ensuring the availability of individual as piece parts as well COTS devices

Electronics and Computers/Batteries

- ISS Laptop Computers and Accessories (computers, printers, Lan network, power supply/adapters)
- Recorders and Audio Equipment (Headsets, Microphones , CD, digital recorder, iPod)
- Handheld Light Intensification Detection and Ranging (HHL), night scope
- GFE cables (camera, laptop, DC power)
- Batteries (battery pack assembly, acceptance/lot testing, capacity testing)


S126E007704


S126E007945



Flight Crew Systems/Other Hardware

- Crew Clothing, Housekeeping, Hygiene, and Office Supplies
- IVA Restraints and Mobility Aids (bungees, brackets)
- Photo/TV Equipment (Digital Still/Video Cameras, lens, batteries)
- ECLSS Water Transfer Equipment (filters, hoses)
- ISS Portable Breathing Apparatus (PBA) and Prebreathe Hose Assembly (PHA)
- Stowage Provisions (CTBs, M-bags, Velcro kits)

Constellation Crew Survival Hardware

- Crew Survival Packs which include:
  - **Flares,**
  - **Survival Radio,**
  - **Strobe Lights,**
  - **Emergency Signaling Mirror**
- Exposure Mittens

AN/PRC-112G

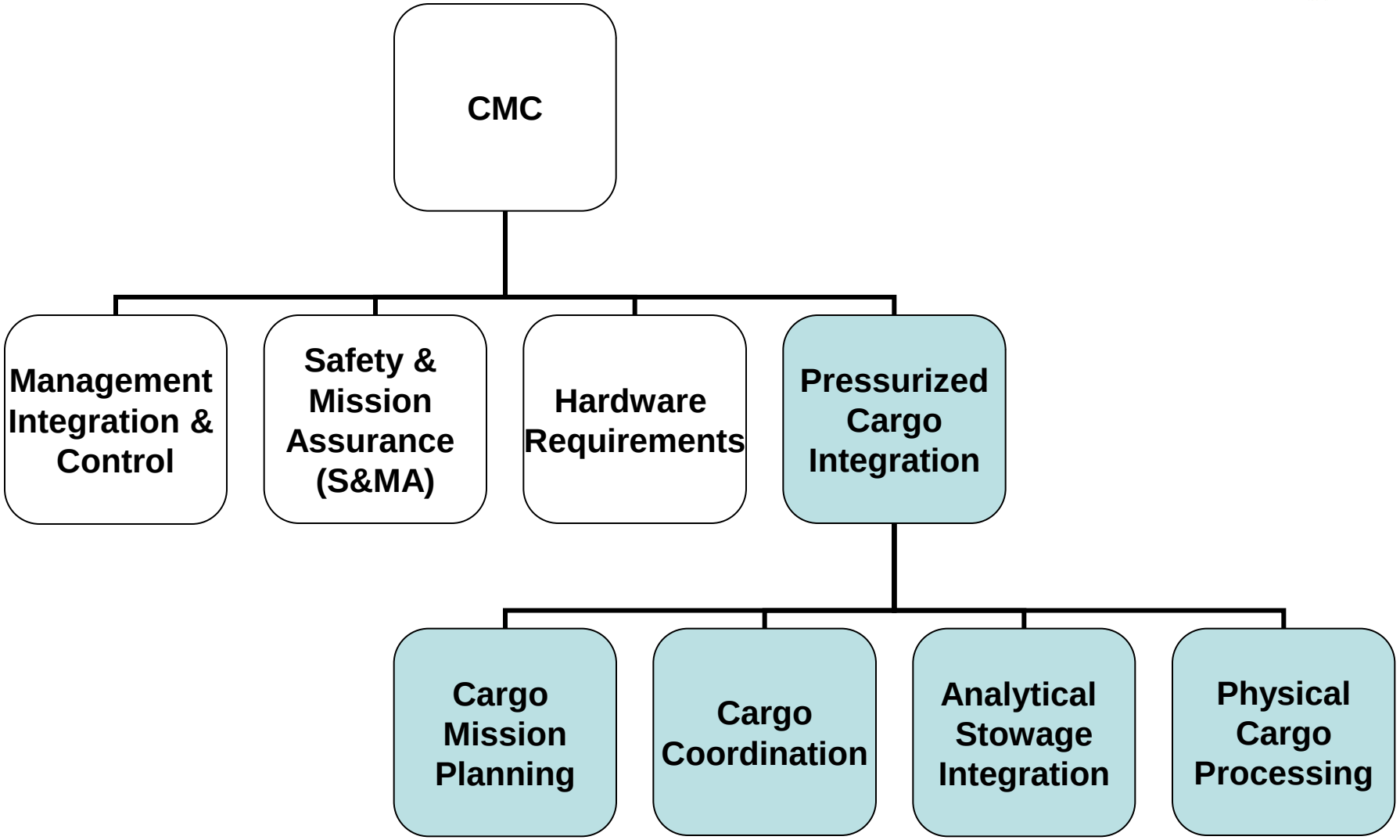
SURVIVAL PACK B

Pressurized Cargo Integration

Scope of Work
Changes in Scope
Flights in Flow
Cargo Loading

Kevin Engelbert
Launch Package Manager/OC2

Scope of Work



Pressurized Cargo Integration

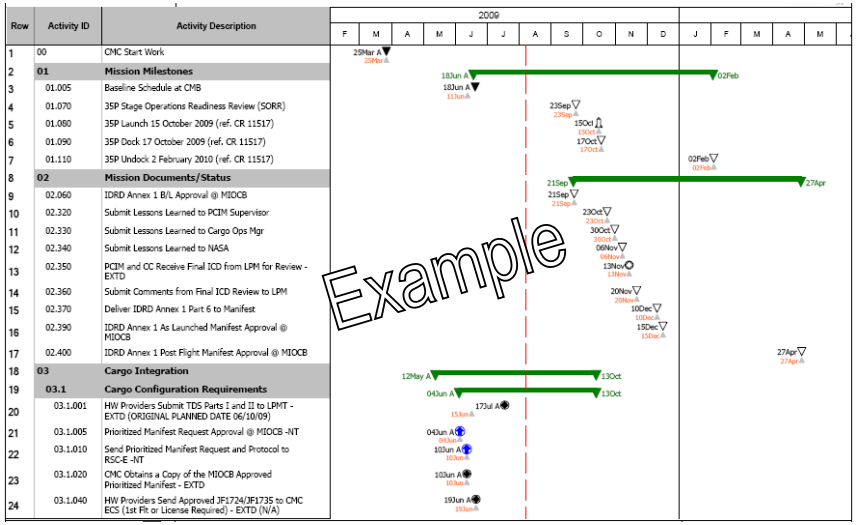
The Contractor shall safely integrate NASA & IP flight hardware and deliver bags to the Next Level Integrator.

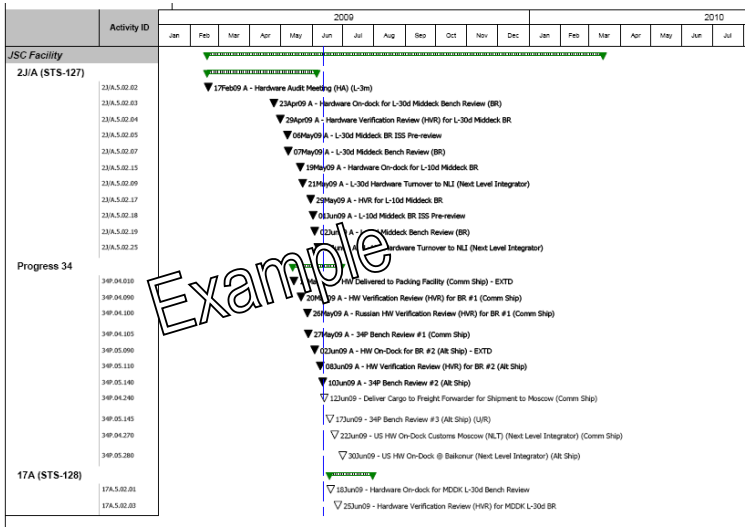
The Contractor shall de-integrate bags returned on Soyuz, COTS, CRS & CEV flights and transfer hardware to its owner

Cargo Mission Planning

The Contractor shall

- Assess manifest options and manifests in the ~~Strategic (L-5 yrs) and~~ Tactical time-frame (L-2 yrs)
- Support NASA Launch Package & Cargo Mission Management teams
  - Stowage assessments
  - Mission-specific cargo integration schedules
- Support NASA Cargo Integration Office
  - Integrated multi-flight schedules
  - Book management for program documentation (e.g. SPIPs)





Cargo Coordination

The Contractor shall

- Update MIDAS database Hardware Accountability Matrix Report (HAMR)
  - coordinate hardware delivery, cargo review and bag turnover dates
  - validate and track hardware data and packing requirements

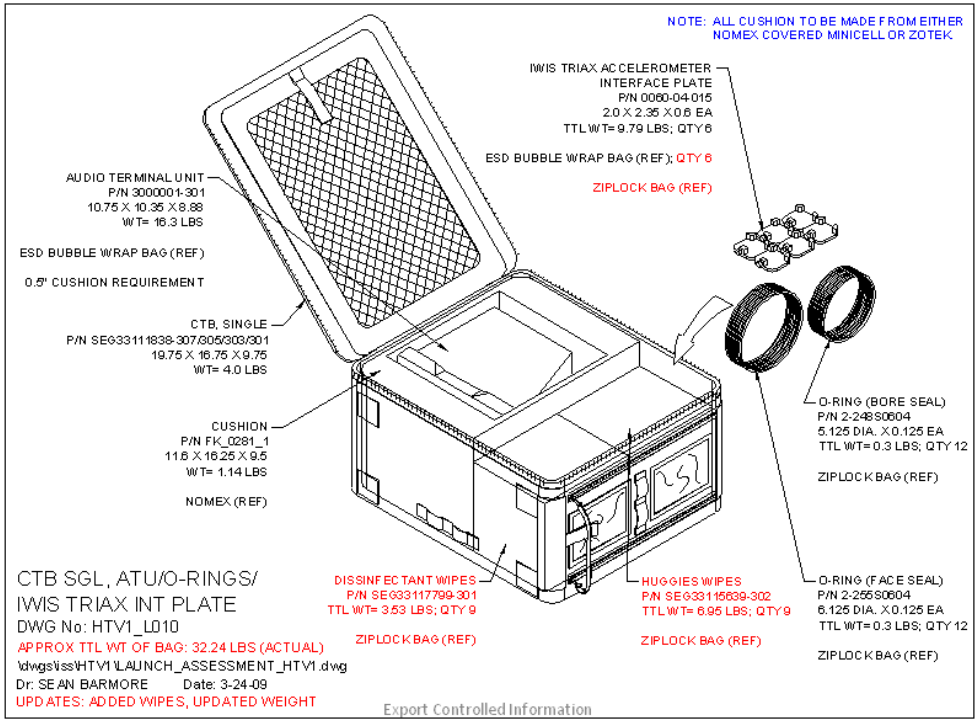
STOWAGE DRAWING NUMBER	OPS NAME	PART NAME	PART NUMBER	ON-DOCK NEED DATE	ON-DOCK EST. DATE	TOX CODE	HAZ CODE	IMS LABEL REQ	CMC IMAGE REQ	VEHICLE CERT	LATE/ EARLY FLAG	SPECIAL PACKING REQ	HW POC
SEG32111470		CUSHION, ELEMENT ASSY BACTERIA	528-38410-2					Y	N			Foam - Minicel approximately 2.54 cm on all sides. Bench	
SEG32111470	Bacteria Filter	ELEMENT ASSY, BACTERIA FILTER	SV810010-1	11-FEB-09	11-FEB-09	N		Y	N				Melissa Rico - 281-226-4014
SEG32111317		SPECIAL CUSHION MWA (2 PARTS)	528-38671-1	27-MAR-09				N	N			MWA Containment System Athletic Shorts	
SEG32111317	Boxer Briefs	BOXER BRIEFS	528-21059-289-HTV1	27-MAR-09		N		Y	N				Shelia Washington - 281-280-2012

- Baseline and update the Return Manifest Disposition Plan (RMDP) flight specific Annex for flights that return cargo to the ground
  - Coordinate Cargo de-Integration plans for returning hardware, including early destow requirements.
  - Update document with as-flown return changes
- Maintain IMS Bar Code data for on-orbit tracking and assist hardware providers with label requests and waiver requests.

Cargo Analytical Integration

The Contractor shall

- Develop bag layouts for all visiting vehicles, and return layouts for COTS, CRS and CEV flights, as well as updating containment in MIDAS.
- Develop mass properties and integrated bag-level hazard assessments
- Provide on-call support during return bag packing operations for the COTS, CRS and CEV mated missions.



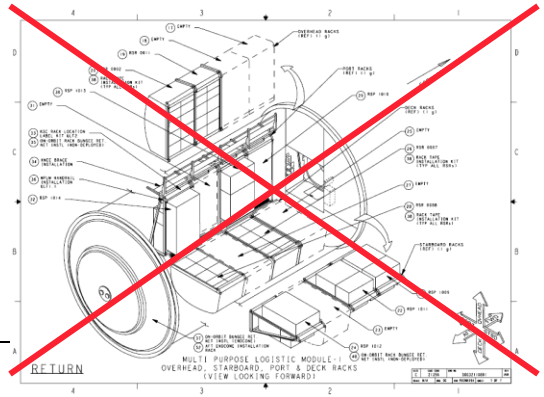
Cargo Physical Processing

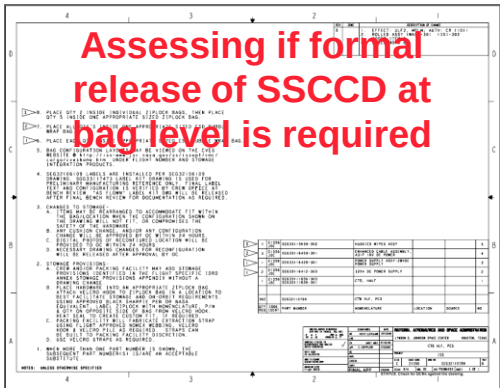
The Contractor shall

- Perform hardware verification as described below for each hardware item as it is received, and coordinate with the hardware provider to resolve any discrepancies.
  - Verify flight hardware meets requirements for hardware labeling, including Operations Nomenclature and Toxicity (HazTox), and produce bag labels. Apply contingency labels when required.
- Provide foam cutting services to manufacture packing provisions for all bags and manufacture packing provisions or mockups for other contractors/IPs when approved by the Government.
- Integrate flight hardware and stowage provisions, perform internal fit checks of bags, and provide As-Built data to the Government.
  - Include crew provisioning in place of foam where appropriate
- Provide opportunities for review of packed bags by hardware providers and Crew/MOD representatives within the bag packing process.
- Coordinate and perform domestic and international shipments of NASA bags to and from the NLI, including hand carry when required.
- De-integrate and disposition ISS hardware and waste for each Sz, COTS, CRS and CEV flight that returns cargo.

Key Changes in Analytical Scope

- Cargo Integration Management
  - ~~Requirements definition (thermal, structural, EMI/EMC, etc.)~~
  - ~~Carrier layout assessments (MPLM)~~
- Stowage Integration
  - Bag Layouts
  - ~~Crew Compartment Configuration Drawings~~
  - ~~Plug-in-Plan for Shuttle Middeck~~
  - ~~Space Station Config. Control Drawings for MPLM~~
  - Support of physical processing anomaly resolution
- Engineering Analysis / S&MA
  - ~~CAD models and integration drawings (MPLM)~~
  - Mass Properties/Center of Gravity (large bags)
  - ~~Math Model Verification (MPLM)~~
  - ~~Verification closure~~
  - Integrated Bag-Level Hazard Assessments





HTV1 Bag Layout Changes

JSC BR #1 – Feb 26, 2009

Vers.	Date	# Bags	Changed	% Chng	Avg/CTBE
1	11-Feb	10			11.13
2	17-Feb	10	0	0%	11.13
3	24-Feb	10	5	50%	11.72
4	25-Feb	10	2	20%	12.31
5	24-Feb	10	0	0%	13.71
6	12-Mar	10	1	10%	13.90
7	31-Mar	10	0	0%	14.52
8	3-Apr	10	0	0%	14.52

Bench Review ←

Flexibility to address changes in requirements is key

KSC BR #1 – Mar 25, 2009

Vers.	Date	# Bags	Changed	% Chng	Avg/CTBE
1	11-Feb	8			5.37
2	23-Feb	8	1	13%	5.61
3	4-Mar	15	2	13%	10.99
4	11-Mar	18	4	22%	10.67
5	17-Mar	18	2	11%	10.61
6	20-Mar	18	6	33%	10.47
7	26-Mar	18	8	44%	10.68
8	6-Apr	19	3	16%	10.27
9	6-Apr	19	0	0%	10.27
10	9-Apr	20	1	5%	10.02
11	13-Apr	20	0	0%	9.91
12	15-Apr	20	0	0%	9.91

Bench Review →

Goal: evolve to an "as-packed" drawing release process

Potential Changes in Physical Scope

Flexibility to handle changes is key
Goal: improve process efficiency

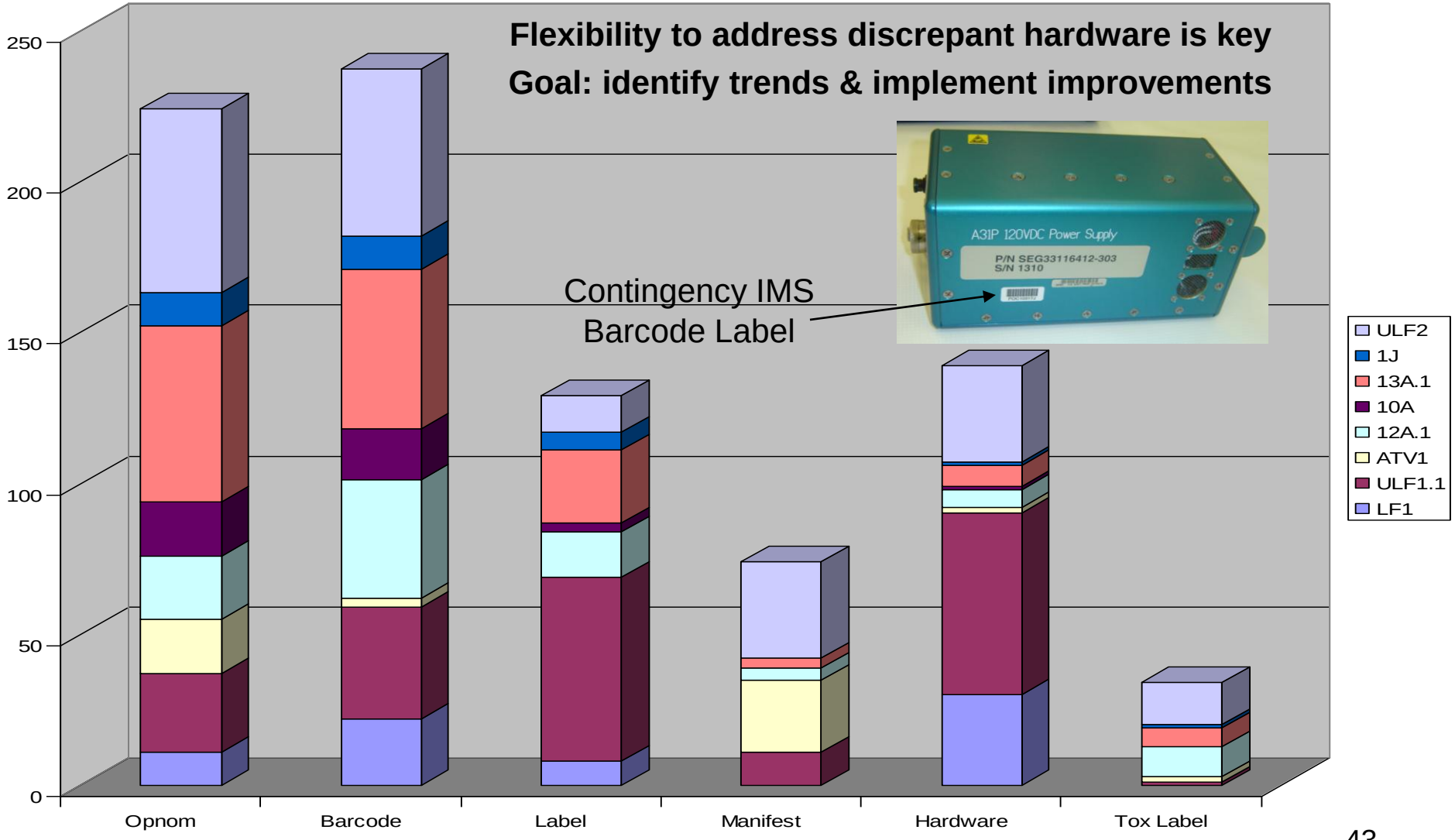
- Continuous Inline Process at one location
  - Hardware Verification, **including sharp edge inspections**
  - Issue Resolution
  - Cargo Packing
- Cargo Review opportunities within Packing Process
  - Virtual review of data / imagery (still & video)
  - Physical review by exception
  - Goal: evolve from primarily physical to primarily virtual reviews
- Reduced quantity of shipments
  - Single shipment for nominal stow cargo
  - Single shipment for late load cargo
  - Capability for additional shipments when required

Received Hardware Issues by Type

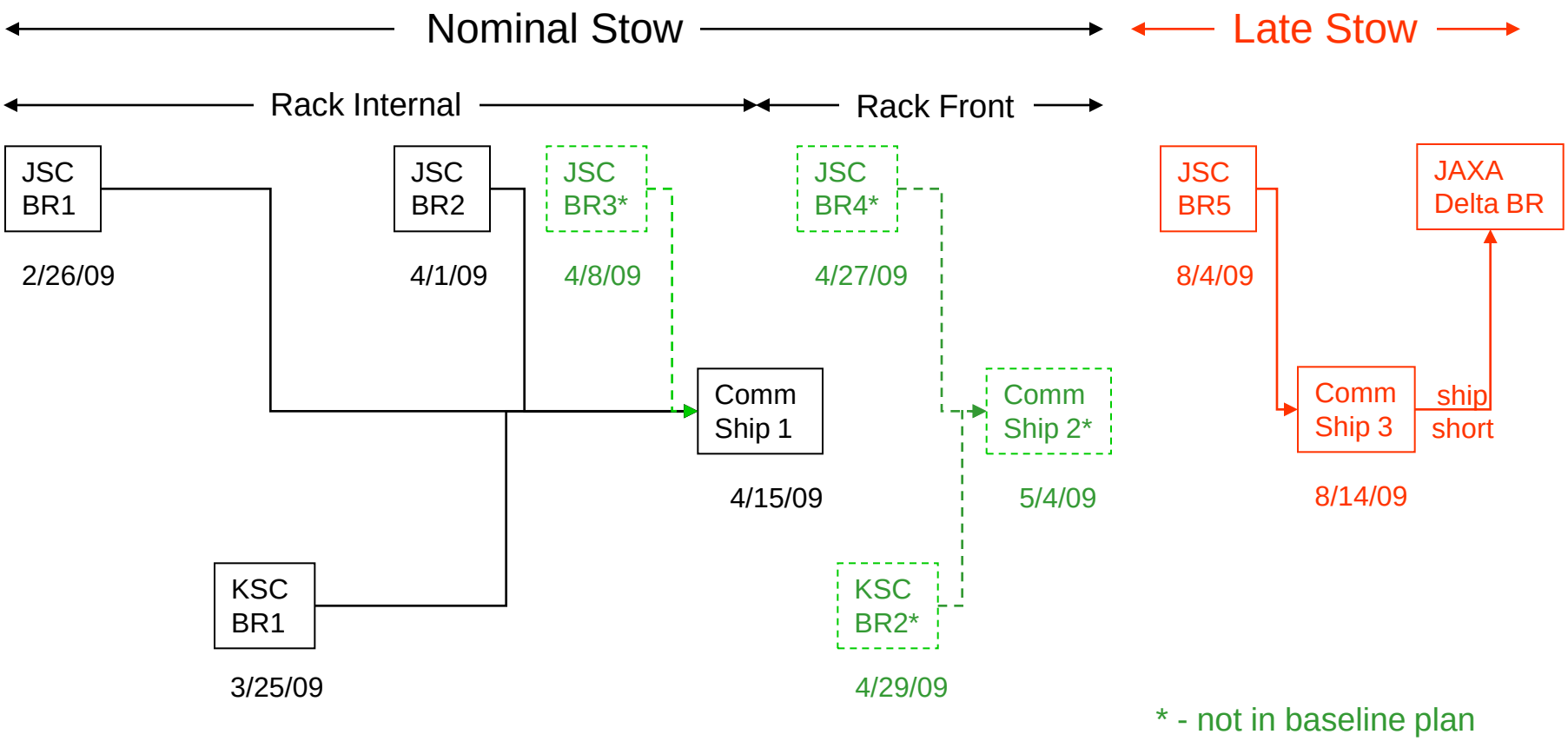
Flexibility to address discrepant hardware is key

Goal: identify trends & implement improvements

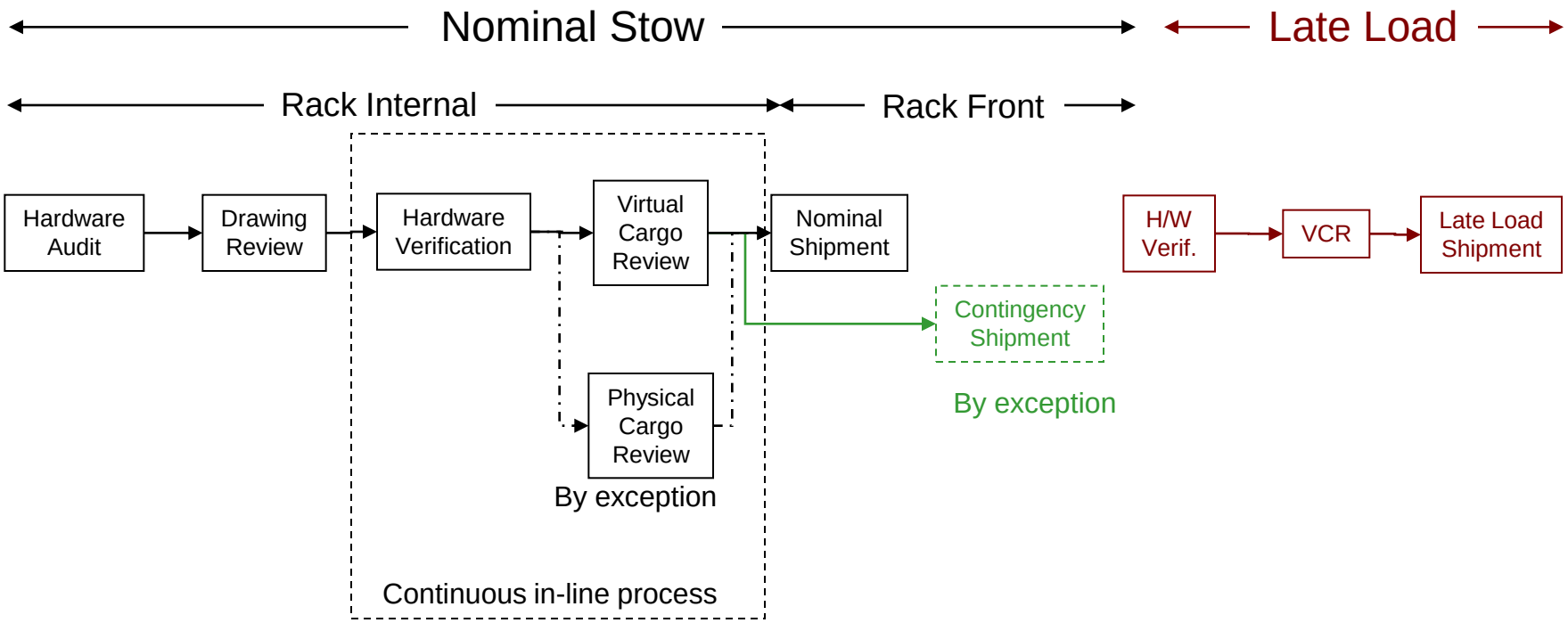
Contingency IMS Barcode Label



Example Cargo Review & Shipping Flow

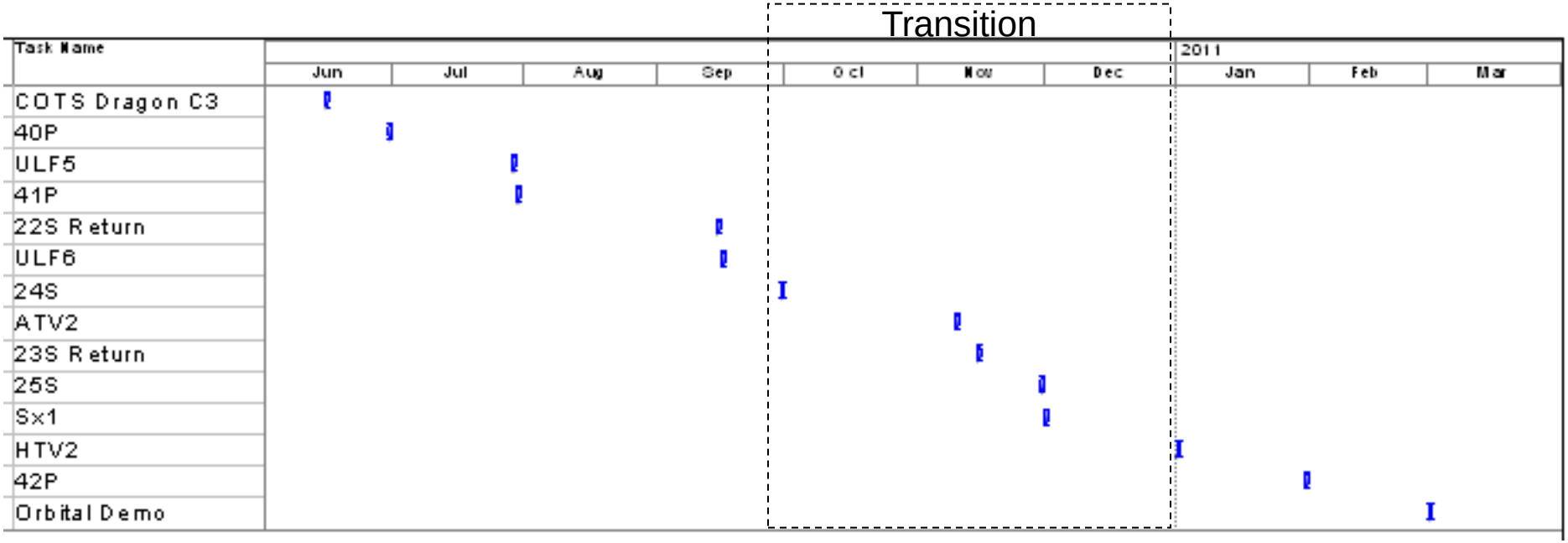


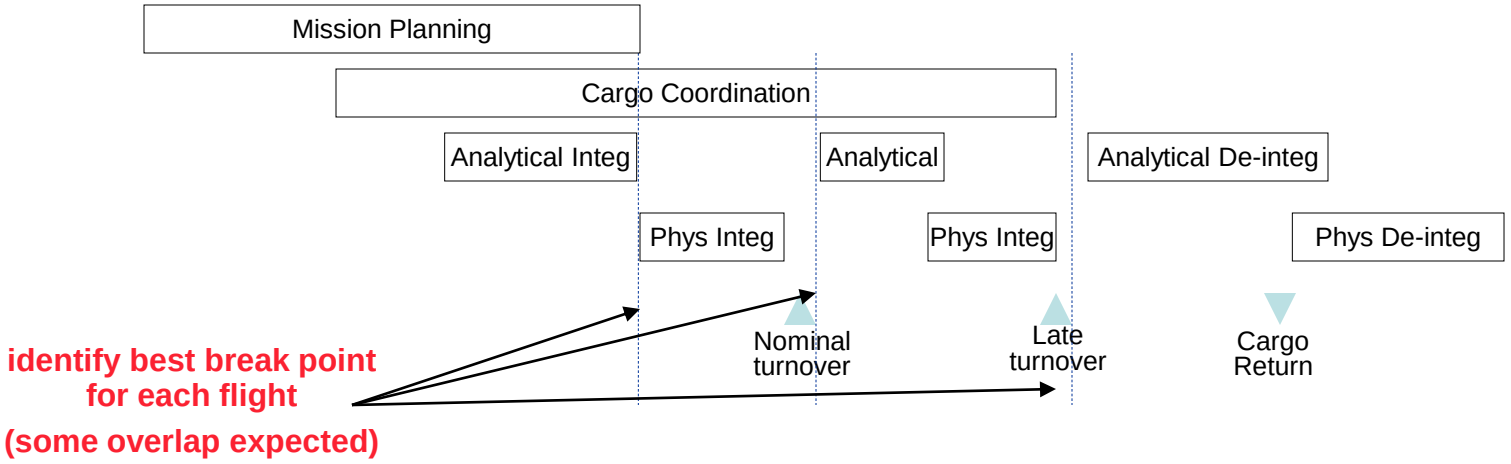
Alternative Cargo Review & Shipping Flow



The Government is interested in each offeror's proposal to improve process efficiency and reduce cost

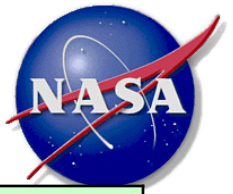
Flights In-Flow During Transition





Flights-In-Flow

(With Estimated Packed Dry Cargo Loading)



CY Total MT Total CTBE	Usable Cargo Upmass (MT) & Volume (CTBE) Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011 12.1 MT 1090 CTBE 767 bags	HTV2 2.1 216	42P 0.4 33	Orb Demo 0.7 68	43P 0.4 33		44P 0.4 33	HTV3 2.4 272	Sx2 1.3 122	45P 0.1 8		Orb1 1.4 138	ATV3 1.5 168
2012 10.0 MT 841 CTBE 558 bags	Sx3 1.5 122	Orb2 1.7 138					HTV4 2.0 244		Sx4 2.1 122		ATV4 2.2 216	
2013 13.9 MT 1248 CTBE 735 bags	Sx5 1.0 122	Orb3 2.1 198			Sx6 1.3 122		HTV5 2.4 272	Orb4 2.3 198			Sx7 1.5 122	ATV5 2.2 216
2014 11.4 MT 1005 CTBE 549 bags	Orb5 2.3 198	Sx8 1.5 122				Sx9 1.5 122	HTV6 2.0 244	Orb6 2.3 198				Sx10 1.5 122
2015 11.7 MT 1016 CTBE 629 bags	Orb7 2.3 198		Sx11 1.0 122				HTV7 2.4 272	Sx12 1.3 122	Orb8 2.3 198	Deorbit Progress 1.3 105		

Grand Total Launch Cargo: 59.2 MT, 5200 CTBE, 3238 bags

Flight
Upmass
CTBE

Assumptions

1) 85% packing efficiency

2) ~230-260 kg/m3 packing density (based on recent historical averages)

Flights-In-Flow
(With Estimated Packed Dry Cargo Loading)

CY Total MT Total CTBE	Usable Cargo Downmass (MT) & Volume (CTBE) Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011 2.6 MT 243 CTBE 154 bags	Sx1 1.3 122							Sx2 1.3 122				
2012 2.6 MT 243 CTBE 154 bags	Sx3 1.3 122								Sx4 1.3 122			
2013 3.9 MT 365 CTBE 231 bags	Sx5 1.3 122				Sx6 1.3 122					Sx7 1.3 122		
2014 3.9 MT 365 CTBE 231 bags		Sx8 1.3 122				Sx9 1.3 122					Sx10 1.3 122	
2015 2.6 MT 243 CTBE 154 bags			Sx11 1.3 122					Sx12 1.3 122				

Grand Total Return Cargo: 15.5 MT, 1458 CTBE, 924 bags

Assumptions

1) 85% packing efficiency

2) ~230-260 kg/m3 packing density (based on historical averages)

Procurement Information

- **Procurement Information**
- **One-on-One Communications with Industry**
- **Procurement Schedule**

Eric Schell
Contracting Officer

Procurement Information

- The Government intends to issue a Draft Request For Proposal (RFP)
  - Following the release of the Draft RFP, Industry will have an opportunity to submit anonymous questions in writing so that the Government may officially respond
- The Government intends to hold a Pre-Proposal Conference
  - Includes One-on-One meetings with Industry
- The Government intends to issue a Final RFP

Procurement Information

- Evaluation factors per NFS 1815.304-70
  - Mission Suitability
  - Past Performance
  - Cost
- Only Mission Suitability will be scored (1000) points
  - Technical 450
  - Management Approach 300
  - Safety 150
  - SDB Participation 100
- The evaluation criteria will be identified in the RFP
- Past Performance: Assess Past Performance
  - Adjective ratings, not weighted or scored
- Cost realism analysis will be performed

Procurement Information

- **Of the evaluation factors to be identified in the RFP**
  - Mission Suitability and past performance when combined are more important than cost
  - Past Performance is more important than cost
  - Mission suitability is more important than past performance and cost when combined

Procurement Information

- **Cost-Plus-Award-Fee (CPAF) (100%)**

- **Baseline (95%)**
  - Program Management, S&MA, Hardware Development, and Pressurized Cargo Processing

- **IDIQ (5%)**
  - Program protecting the ability to build Flight Support Equipment (FSE)
  - Program has planned FSE in inventory, this protects for unplanned need to launch ORU that require unique FSE

Procurement Information

CMC Subcontracting Goals

Small Business	**20.0%**
Small Disadvantaged Business	9.0%
Women Owned Small Business	5.0%
Veteran Owned Small Business	1.5%
Service Disabled Veteran Owned Small Business	1.0%
HubZone	1.0%
Historically Black College or University and Minority Institutions	0.5%

Procurement Information

- Contract schedule provides for a 90 day phase-in (transition) period
  - Offerors phase-in proposal will address:
    - Continuity of services and integration of new services (FCE)
    - Adequate staffing of critical positions
    - Adequate training of personnel
    - Risk mitigation
    - HSPD-12 badging requirements

- The Cargo Mission Contract start date has slipped to January 2011
  - The CMC start date will slip further if additional slips occur in the schedule for the remaining Shuttle flights

Milestones for the Acquisition

Industry Day	05/04/2009
Future Requirements Presentation	08/20/2009
Issue Draft RFP	10/30/2009
Pre Proposal Conference	11/15/2009
Issue Final RFP	01/15/2010
Proposals Due	04/01/2010
Contract Award	09/30/2010
Phase-In Period Begins	10/01/2010
Contract Effective Date	01/01/2011

One-on-One Communication with Industry

- Aug 20th-21st, 2009 @ Gilruth, Rio Grande Room (2nd floor)
- No more than five individuals may represent any party or team of parties
- Only one meeting will be allowed
- Meetings will not exceed 30 minutes in length

- Goals of One-on-One Communication
  - To promote and facilitate open communication with industry
  - To allow industry the opportunity to openly communicate with the Government by providing comments and inputs early enough in the procurement process for consideration during the procurement strategy

HOW TO GET CONNECTED

- ISS CMC Procurement Website
  http://procurement.jsc.nasa.gov/isscmc/

- NASA/JSC Business Opportunities Home Page
  Set up your user profile
  http://prod.nais.nasa.gov/cgi-bin/eps/bizops.cgi?gr=D&pin=73

- NASA Acquisition Internet Service (NAIS)
  http://procurement.nasa.gov

- JSC Procurement Website
  http://procurement.jsc.nasa.gov/procpub.htm

Thank you for attending!

A copy of this presentation will be posted on the acquisition website:

http://procurement.jsc.nasa.gov/isscmc/

Acronyms

ACES	Advanced Crew Escape Suit
AMS	Alpha Magnetic Spectrometer
ARED	Advanced Resistive Exercise Device
ATV	Automated Transfer Vehicle
BCDU	Battery Charge Discharge Unit
BRJ	Body Roll joint
CCTV	Close Circuit Television
CD	Compact Disc
CEIT	Crew equipment Translation Assembly
CIL	Critical Items List
CoFR	Certification of Flight Readiness
CMC	Cargo Mission Contract
CTB	Cargo Transfer Bag
CTC	Cargo Transportation Container
CRS	Commercial Resupply Services
CWC	Contingency Water Container
DCSU	Direct Current Switching Unit
DHS	Department Homeland Security
DM	Direct Mount
DOS	Department of State
DOT	Department of Transportation
ELC	Express Logistics Carrier
EMI	Electromagnetic Interference
EOS	Emergency Oxygen System
ESP	External Stowage Platform
EVA	ExtraVehicular Activity
EVR	ExtraVehicular Robotics
EXP	Express Pallet
FCE	Flight Crew Equipment
FMEA	Failure Modes and Effect Analysis
FRAM	Flight Release Attachment Mechanism
GFE	Government Furnished Equipment
HTV	H-II Transfer Vehicle
ICC	Integrated Cargo Carrier
ICC-L	Integrated Cargo Carrier – Lite
ICD	Interface Control Document
IELK	Individual Equipment Liner Kit
IFM	In Flight Maintenance
IP	International Partner
IVA	Internal Vehicle Activity
KSC	Kennedy Space Center
LEE	Latching End Effector
LIDAR	Light Intensification Detection and Ranging
LMC	Lightweight MPESS
LRU	Line Replacement Unit
LTM PF	Low Temperature Microgravity Physics Facility
MERLIN	Microgravity Experiment Research Locker Incubator II
MLI	Multi Layer Insulation
M&O	Maintenance & Operation
MMOD	Micro-meteoroid Orbiting Debris
MPLM	Multi Purpose Logistics Module
NAIS	NASA Acquisition Internet Strategy
NBL	Neutral Buoyancy Laboratory
NLI	Next Level Integrator
OGS	Oxygen Generation System
OPF	Orbital Processing Facility
ORU	Orbital Replacement Unit
OSE	Orbital Support Equipment
OTD	Orbital Transfer Device
PDA	Pre-Delivery Acceptance Test
PFCS	Pump Flow Control System
PGHM	Payload Ground Handling Mechanism
PIA	Pre-Installation Acceptance Document
PM	Pump Module

Acronyms

PTU	**Pan Tilt Unit**
RDE	**Responsible Design Engineer**
RMDP	**Return Manifest Disposition Plan**
RSP	**Resupply Stowage Platform**
RSR	**Resupply Stowage Rack**
S&MA	**Safety & Mission Assurance**
SLP	**Spacelab Pallet**
SPDM	**Special Purpose Dexterous Manipulator**
SPOC	**Space Program Operations Contract**
SPP	**Space Shuttle Program**
SSRMS	**Space Station Robotic Manipulator System**
STS	**Space Transportation System**
SWC	**Sidewall Carrier**
TCS	**Trajectory Control Sensor**
TERA	**Temporary Equipment Restraint Aid**
TOCA	**Total Organic Carbon Analyzer**
TT&E	**Test Teardown & Evaluation**
UTAS	**Universal Trunnion Attachment System**
VCC	**Vertical Cargo Carrier**
VLA	**Verification Loads Assessment**
VMDB	**Vehicle Master Data Base**
WRS	**Waste Recovery System**